DAPI Dihydrochloride

Catalog No.C14575 Batch:C1457503

Product Datasheet

Technical Data

Formula	$C_{16}H_{15}N_{5\cdot2}ClH$					
Molecular Weight	350.25	**CAS No.**	28718-90-3			
Solubility (25°C)*	In vitro	DMSO	70 mg/mL (199.85 mM)			
		Water	10 mg/mL (28.55 mM)			
		Ethanol	Insoluble			
	In vivo (Add solvents to the product individually and in order)	Oral Administration	Homogeneous suspension	CMC-NA	≥5mg/ml	Taking the 1 mL working solution as an example, add 5 mg of this product to 1 ml of CMC-Na solution, mix evenly to obtain a homogeneous suspension with a final concentration of 5 mg/ml.
		Injection	Clear solution	5%DMSO [1]→ 40%PEG300 [2]→ 5%Tween80 [3]→ 50%ddH2O Validated by Capsid Bio labs. Should you need adjustments to this formulation, contact our sales team for custom testing.	3.5mg/ml (9.99mM)	Taking the 1 mL working solution as an example, add 50 μL of 70 mg/ml clarified DMSO stock solution to 400 μL of PEG300, mix evenly to clarify it; add 50 μL of Tween80 to the above system, mix evenly to clarify; then continue to add 500 μL of ddH2O to adjust the volume to 1 mL. The mixed solution should be used immediately for optimal results.
			Clear solution	5% DMSO [1]→ 95% Corn oil Validated by Capsid Bio labs. Should you need adjustments to this formulation, contact our sales team for custom testing.	0.33mg/ml (0.94mM)	Taking the 1 mL working solution as an example, add 50 μL of 6.6 mg/ml clear DMSO stock solution to 950 μL of corn oil and mix evenly. The mixed solution should be used immediately for optimal results.

* <1 mg/ml means slightly soluble or insoluble.
* Please note that Capsid Bio tests the solubility of all compounds in-house, and the actual solubility may differ slightly from published values. This is normal and is due to slight batch-to-batch variations.
* Room temperature shipping (Stability testing shows this product can be shipped at 2-8°C for storage purposes.)

Preparing Stock Solutions

Concentration \ Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.8551 mL	14.2755 mL	28.5510 mL
5 mM	0.5710 mL	2.8551 mL	5.7102 mL
10 mM	0.2855 mL	1.4276 mL	2.8551 mL
50 mM	0.0571 mL	0.2855 mL	0.5710 mL

Biological Activity

Description	DAPI Dihydrochloride (DAPI 2HCl) is a fluorescent dye that binds strongly to adenine–thymine-rich regions in DNA.
In vitro	DAPI associates with the minor groove of double-stranded DNA, with a preference for the adenine-thymine clusters. Cells must be permeabilized and/or fixed for DAPI to enter the cell and to bind DNA. Fluorescence increases approximately 20-fold when DAPI is bound to double-stranded DNA. ^{[1]}

References

https://pubmed.ncbi.nlm.nih.gov/8580206/

RETURN POLICY

Capsid Bio's Unconditional Return Policy ensures a smooth online shopping experience for our customers. If you are in any way unsatisfied with your purchase, you may return any item(s) within 7 days of receiving it. In the event of product quality issues, either protocol related or product related problems, you may return any item(s) within 365 days from the original purchase date. Please follow the instructions below when returning products.

SHIPPING & STORAGE

Capsid Bio products are transported at room temperature. If you receive the product at room temperature, please rest assured, the Capsid Bio Quality Inspection Department has conducted experiments to verify that the normal temperature placement of one month will not affect the biological activity of powder products. After collecting, please store the product according to the requirements described in the datasheet. Most Capsid Bio products are stable under the recommended conditions.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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